

REMARKS

Claims 27 and 34 are pending in this application of which claim 27 is independent.
Claims 1-26, 28-33, and 35-81 have been cancelled.

Initially, Applicant thanks Examiner for indicating that claim 27 would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. Applicant also thanks Examiner for indicating that claim 34 would be allowable if rewritten to overcome the rejection under 35 U.S.C. 112 second paragraph and to include all of the limitations of the base claim and any intervening claims.

Applicant has amended claims 27 and 34 according to Examiner's suggestions for being in condition for allowance. Applicant has amended claims 23 and 44 to include all of the limitations of their base claims.

The Examiner rejected claim 23 under 35 U.S.C. 102(b) as being anticipated by Chung (5,039,546). On page 4 of the office action, Examiner contends that col. 4, lines 14-26 of Chung teaches that "the surface of the metallic bone implant after the treatment with the aqueous solution containing fluoride ions has essentially the same morphology as the surface of the implant before said treatment."

Applicant contends that the col. 4, lines 14-26 of Chung teaches the opposite of the Examiner's contention, that in fact, the samples treated with fluoride exhibit a different morphology from the samples without fluoride treatment as evident when the samples are soaked in acid. In col. 4, lines 17-23, Chung describes that "the fluoride treated samples after acid soaking retained the integrity of the coating and showed similar surface morphology of the coating as the original (fluoride-treated) sample without acid soaking. On the other hand, those samples without fluoride treatment showed considerable surface damage and morphology change of the coating after acid soaking." Clearly the fluoride-treated samples of Chung exhibit a different morphology than the samples without fluoride treatment.

The Examiner rejected claim 44 under 35 U.S.C. 103(a) as being unpatentable over Chung (5,039,546) in view of the admitted prior art on page 7, lines 10-15 of Applicant's disclosure. On page 6 of the office action, Examiner contends that it would have been obvious to

one of ordinary skill to apply a solution containing calcium ions to Chung's implant in order to determine biocompatibility of the implant.

One with ordinary skill would not be motivated to treat Chung's implant with calcium ions after the fluoride treatment. According to Applicant's specification on page 6, the implant does not contain calcium until it is treated with calcium ions. Therefore, as described in Applicant's specification on page 6, lines 20-22, "a metallic implant with a fluoride or fluorine containing surface may be further treated with a solution containing calcium ions in order to further improve the biocompatibility."

Unlike Applicant's implant after the fluoride treatment step, Chung's implant, after being treated with fluoride, contains calcium. As described in Chung in col. 3, line 64 to col. 4, line 2, "It is clear that the fluoride treatment of the HA coated dental implant decreases the dissolution rate considerably. After fluoride treatment, the underdecomposed HA together with the decomposed products such as oxyapatite, tricalcium phosphate and tetracalcium phosphate will convert to less soluble fluoride compounds such as fluorapatite and calcium fluoride." Thus, one skilled in the art would not be motivated to apply calcium ions to Chung's implant because it already contains calcium.

Applicant has added new claim 82 that recites the process of treating a metallic bone implant, generally as in claim 23 with an aqueous solution free of sodium and sodium ions, *** and with the solution of a fluoride provided from hydrofluoric acid. Claim 82 also recites that the surface of the metallic bone implant after the treatment with the aqueous solution containing fluoride ions has essentially the same morphology as the surface of the implant before said treatment.

Thus for the reasons discussed in claim 23 and claim 44 this claim is also believed to be allowable.

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Serial No. : 09/602,528
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Page : 7 of 7

Attorney's Docket No.: 14395-199001 / PC-
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Applicant asks that all claims be allowed. Enclosed is a \$450 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: _____

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Denis G. Maloney
Reg. No. 29,670

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804
Telephone: (617) 542-5070
Facsimile: (617) 542-8906